Listing of the Claims

1. (Currently Amended) A method of ~~improving the reliability of~~ managing peer-to-peer network downloads, comprising:

initiating a broadcast search from a client on a peer-to-peer network;

receiving a list of servers that satisfy the search;

comparing a connection speed of at least one of the servers to an available network access bandwidth of the client;

selecting one of a plurality of downloading systems based on the comparison; and

downloading a file using one of the plurality of downloading systems.

2. (Previously Presented) The method of claim 1, wherein the one of the plurality of downloading systems is a multiple concurrent download system.

3. (Previously Presented) The method of claim 1, wherein the one of the plurality of downloading systems is a multiple concatenated download system.

4. (Previously Presented) The method of claim 1, wherein the one of the plurality of downloading systems is a serial concatenated download system.

5. (Previously Presented) The method of claim 1, further comprising:

determining the connection speed of the at least one of the servers.

6. (Cancelled)

7. (Previously Presented) The method of claim 1, wherein initiating the broadcast search from the client on the peer-to-peer network further comprises:

entering a text string.

8. (Previously Presented) The method of claim 1, wherein initiating the broadcast search from the client on the peer-to-peer network further comprises:

entering a unique key.

Claims 9-10 (Cancelled).

11.   (Previously Presented) The method of claim 1, wherein receiving the list of servers further comprises:

receiving a document name.

12.   (Previously Presented) The method of claim 1, wherein receiving the list of servers further comprises:

receiving a file size.

13.   (Original) The method of claim 1, wherein receiving the list of servers further comprises:

receiving a source node for a file.

14.   (Previously Presented) The method of claim 1, wherein receiving the list of servers further comprises:

receiving an available bandwidth at at least one of the servers.

15.   (Currently Amended) A method of ~~improving the reliability of~~ managing peer-to-peer network downloads, comprising :

broadcasting a search query from a client over the peer-to-peer network;

receiving a list of servers and a list of associated document names that satisfy the search query;

comparing a connection speed of at least one of the servers on the list of servers to an available network access bandwidth of the client;

determining one of a plurality of downloading systems based on the comparison; and

downloading a file via the [[once]]one of the plurality of downloading systems.

16.   (Previously Presented) The method of claim 15, wherein further comprising:

entering a unique key that identifies the file.

17.   (Previously Presented) The method of claim 15, wherein receiving the list of servers further comprises:

receiving a file size, a source node and a unique key.

18.   (Previously Presented) The method of claim 15, further comprising:

measuring the connection speed to the at least one of the servers on the list of servers.

19.   (Previously Presented) The method of claim 15, wherein determining one of the plurality of downloading systems further comprises:

determining if an available bandwidth of the client is less than a connection speed to two of the servers on the list;

when the available bandwidth of the client is less than the connection speed to the two of the servers, selecting a serial concatenated download system.

20.   (Previously Presented) The method of claim 19, further comprising:

when the available bandwidth is not less than the connection speed to the two of the servers, selecting a multiple concurrent download system.

21.   (Previously Presented) The method of claim 19, further comprising:

when the available bandwidth is not less than the connection speed to the two of the servers, selecting a multiple concatenated download system.

22.   (Previously Presented) The method of claim 19, wherein selecting the serial concatenated download system further comprises:

starting a download from a first one of two servers; and

if the download from the first one of the two servers is interrupted during the download, selecting a second one of the two servers to start a download at a next byte after a last received byte.

23.   (Previously Presented) The method of claim 20, wherein selecting the multiple concurrent download system further comprises:

starting a download from at least two servers;

if any of the servers finishes the download, terminating the download from any other server.

24.   (Previously Presented) The method of claim 21, wherein selecting the multiple concatenated download system further comprises:

starting a first download at a first byte of the file from a first one of the two servers;

starting a second download at a second byte of the file from a second one of the two servers;

determining when a complete file has been downloaded by combining the first download and the second download.

25.   (Currently Amended) A method of operating a peer-to-peer network comprising:

initiating a broadcast search from a first peer to the peer-to-peer network;

receiving a list of peer servers that meet a search query;

comparing a connection speed to at least one of the peer servers to an available network access bandwidth of the first peer;

selecting one of a plurality of downloading systems based on the comparison; and

downloading a file using the selected one of the downloading systems.

26.   (Previously Presented) The method of claim 25, wherein selecting one of the plurality of downloading systems further comprises:

determining the connection speed to each of the peer servers on the list of peer servers;

selecting a subset of the list of peer servers based on the determined connection speeds.

27.   (Previously Presented) The method of claim 26, wherein determining the connection speed to each of the peer servers on the list of peer servers further comprises:

requesting and receiving a test file from each of the servers on the list of servers.

28.   (Previously Presented) The method of claim 26, wherein determining the connection speed to each of the peer servers on the list of peer servers further comprises:

determining an order of response from each of the servers on the list of servers.

29.   (Previously Presented) The method of claim 26, wherein determining the connection speed to each of the peer servers on the list of peer servers further comprises:
        pinging each of the servers on the list of servers.

30.   (Previously Presented) The method of claim 25, wherein downloading the file using the one of the plurality of downloading systems further comprises:
        when the available bandwidth is less than two times the connection speed to at least one of the peer servers, selecting a server with a fastest connection speed; and
        starting a download from the server with the fastest connection speed.

31.   (Previously Presented) The method of claim 30, further comprising:
        determining if the server with the fastest connection speed had an error before the file download was completed;
        when the server with the fastest connection speed had an error before the file download was completed, selecting a second server;
        determining a last byte received;
        transmitting a download starting from a next byte command to a second server.

32.   (Previously Presented) The method of claim 25, wherein downloading the file using the selected one of the downloading systems further comprises:
        when an available bandwidth is not less than two times the connection speed to at least one of the peer servers, selecting a plurality of servers from the list of servers;
        starting a plurality of simultaneous downloads from the plurality of servers.

33.   (Previously Presented). The method of claim 32, further comprising:
        determining if the client has received a complete version of the file from one of the plurality of servers;
        when the client has received a complete version of the file from one of the plurality of servers, terminating remaining downloads.

34.   (Previously Presented) The method of claim 25, wherein downloading the file using the one of the plurality of downloading systems further comprises:

when an available bandwidth is not less than two times the connection speed to at least one of the peer servers, selecting a plurality of servers from the list of servers;

starting a plurality of simultaneous offset downloads from the plurality of servers.

35.   (Previously Presented) The method of claim 34, further comprising:

when a complete file can be formed from the plurality of simultaneous offset downloads, constructing a complete file.

36.   (Previously Presented) A method of operating a peer-to-peer network comprising:

initiating a search from a first peer to the peer-to-peer network;

receiving a list of peer servers, a plurality of associated file names, a plurality of file sizes, a plurality of bandwidths and a plurality of source nodes that meet a search query;

determining a connection speed to each of the peer servers on the list of peer servers;

selecting a subset of the list of peer servers based on the connection speed;

when an available bandwidth is less than two times a connection speed:

selecting a server with a fastest connection speed;

starting a download from the server with the fastest connection speed;

determining if the server with the fastest connection speed had an error before the file was downloaded;

when the server with the fastest connection speed had an error before the file was downloaded:

selecting a second server;

determining a last byte received;

transmitting a download starting from a next byte command to a second server;

when an available bandwidth is not less than two times a connection speed:

selecting a plurality of servers from the list of servers;

starting a plurality of simultaneous downloads from the plurality of servers;

determining if the client has received a complete version of the file from one of the plurality of servers; and

when the client has received a complete version of the file from one of the plurality of servers, terminating a rest of the downloads.

37.   (Withdrawn) A method comprising:

broadcasting a search request to a network;

receiving first information associated with a first peer capable of satisfying the search request;

receiving second information associated with a second peer capable of satisfying the search request;

determining a first metric associated with a connection to the first peer;

determining a second metric associated with a connection to the network;

comparing the first metric to the second metric; and

selecting a download system based on the comparison.

38.   (Withdrawn) A method as defined in claim 37, further comprising satisfying the request using at least one of the first peer or the second peer and using the selected download system.

39.   (Withdrawn) A method as defined in claim 37, wherein satisfying the request using at least one of the first peer or the second peer comprises downloading a file from at least one of the first peer or the second peer using the download system.

40.   (Withdrawn) A method as defined in claim 37, wherein the selected download system is one of a serial concatenated download system, a multiple concurrent download system, or a multiple concatenated download system.

41.   (Withdrawn) A method as defined in claim 37, wherein at least one of the first metric or the second metric is a data transfer rate.

42.   (Withdrawn) A method as defined in claim 37, wherein selecting the download system based on the comparison comprises, when the second metric is greater than the first metric, selecting a multiple download system.

43.   (Withdrawn) A method as defined in claim 42, wherein the multiple download system is at least one of a multiple concurrent download system or a multiple concatenated download system.

44.   (Withdrawn) A method as defined in claim 37, wherein the first information is the network address of the first peer.